

ABSTRACT OF THE DISCLOSURE

An electromagnetic actuator comprises:

a core with a coil wound around;

5 a stator magnetically coupled at both ends of the
core;

a movable element that can be displaced relative
to the stator; and

a supporting means for supporting the movable
element,

10 wherein the stator and the movable element each
have a projection and a depression perpendicular to
their respective displacement directions and are placed
in such a way that the projection and depression of the
stator engage with the projection and depression of the
15 movable element.